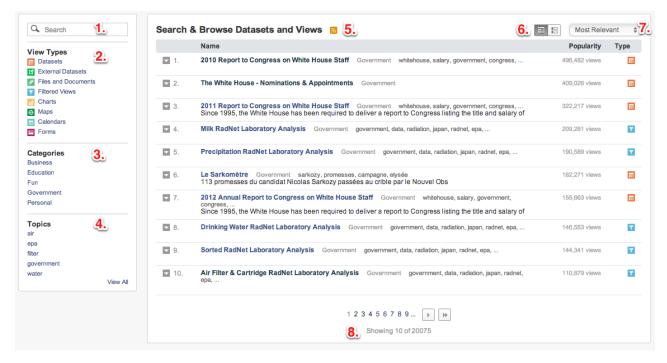


Contents

Overview of the Connecticut Open Data Portal and the Socrata platform	2
Navigating a dataset	4
Preparing Your Data	7
Publishing a Dataset	
LOCATION	
METADATA	

Overview of the Connecticut Open Data Portal and the Socrata platform:

The dataset catalog is typically the first thing you see on a Socrata site, so what does everything mean on the catalog page?



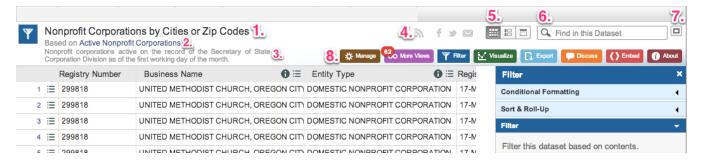
- **1. Search:** Enter in a keyword or words to search the catalog for matches. Results will be presented in the following order: matches in the title, matches in the dataset, and matches in the metadata. Standard boolean operators can be used, meaning you can type AND or OR between words to specify the type of search performed; an AND search is performed if no operator is specified. We also use word stemming, which means that if you type "educational," you will also get results that match education, educating, educate, etc.
- 2. View Types: Clicking on one of these will filter the catalog with data of only that type.
 - Datasets: These are datasets uploaded into the Socrata platform.
 - External Datasets: links to datasets stored elsewhere on the web.

- Files and Documents: downloadable files such as PDFs or Word documents
- Filtered Views: These are saved filtered Datasets. This is a view of a the type Dataset, and will be linked to the original Dataset through the "More Views" tab.
- Charts: Charts such as pie charts and bar charts created from Datasets. These will also be
 linked to the original Dataset through the "More Views" tab.
- Maps: Maps created from geolocation data or geospatial data (shapefile, kml, or kmz file). If it is based on geolocation data, it will also be linked to the original Dataset through the "More Views" tab.
- Calendars: Calendars created from Date & Time data in a Dataset. These will be linked to the original Dataset through the "More Views" tab.
- Forms: Forms are created from a Dataset, to collect information from users. These will be linked to the original Dataset through the "More Views" tab.
- **3. Categories:** Clicking on a category will filter the catalog for all datasets with that category selected in the dataset metadata. These categories are set-up and customized by Administrators through the Admin panel.
- **4. Topics:** Clicking on a Topic will filter the catalog by all datasets tagged with that word. This section is populated with terms as they are tagged on Datasets in the metadata.
- 5. RSS Subscription: Clicking on this allows users to subscribe to updates on the catalog.
- **6. Catalog Display Format:** Toggle between detailed and rich display views of the catalog.
- **7. Sort:** You can sort the catalog in a number of different ways:
 - Most Relevant: This is generally associated with a search term, and is calculated based on a normalization of the number of views.
 - Most Accessed: You can select "This Week," "This Month," and "This Year" and is based on the number of views of the page, or "Popularity."
 - Alphabetical: Sorted alphanumerically.
 - Newest: Sorted by the most recently added datasets.

- Oldest: Sorted by the least recently added datasets.
- Recently Updated: Sorted by the most recently updated datasets. This also takes into account newly added datasets, as their most recent update is the date of upload.
- Highest Rated: Sorted based on the average rating given to the dataset by users on the site.
- Most Comments: Sorted by the dataset with the most comments.
- **8. Number of Datasets in the catalog and the page:** The text "Showing 10 of 20075" indicates the number of dataset on the page you are viewing, out of the total number of datasets and views in the catalog. For example, as you move through the pages, these numbers will not change.

Navigating a dataset

Once you have found an interesting dataset, chart, or map to look at, what can you do on the page?



For reference, "View" means any filter, chart, map, etc that is "Saved" from a dataset.

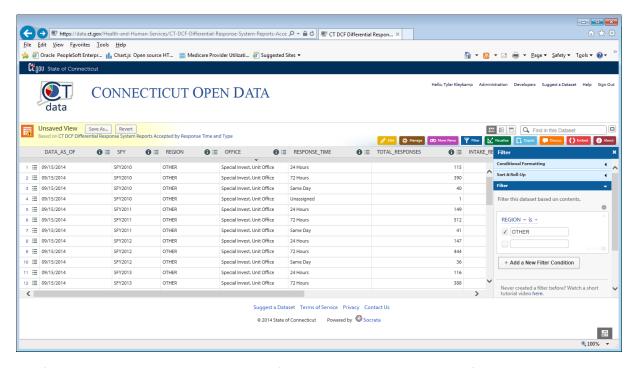
- **1. Title:** This is the title given to the dataset or view. Views, such as charts, can have a different name from the dataset it is based on.
- **2. Based On:** If you are on a view, this will link to the dataset that the view is based on. For example, if you create a pie chart of the total number of governors for each party, this would link back to the dataset with the numbers for each year.
- **3. Description:** This is the description given to the dataset or view.
- 4. Social Media: This allows you to interact with this dataset or view through social media:
 - RSS Subscription: Subscribe to updates on the dataset

- Facebook: Share the dataset or view on Facebook
- Twitter: Share the dataset or view on Twitter
- Email: Share the dataset or view over email
- **5. Dataset View:** These buttons allow you to switch between the different views of a dataset or view, you can have more than one view splitting the screen vertically at a time
 - Detail Row: This view displays each column and row in a tabular format (seen in example above)
 - Fat Row: This view displays the details for each row grouped together, for example columns may be in a vertical list.
 - Single Row: This view displays all the details for one row at a time, There are arrows to scroll through next and previous rows.
 - Chart: If you are viewing a chart a button for the chart view will appear.
 - Map: If you are viewing a map, a button for the map view will appear.
- **6. Search:** Enter in a word or words to search within the dataset for matches.
- **7. Full Screen:** Make the dataset or view full screen on your display.
- **8. Sidebar Buttons:** Each of these buttons opens up a sidebar on the right-hand side of the dataset or view. Not all will appear, depending on if you are logged in and what role you have on the site. For more about user roles, read this article.
 - Edit: Click this sidebar to create a working copy and edit the dataset. From a working copy, you can edit individual cells, append new rows, or replace the entire dataset.
 - Manage: Click this sidebar to transfer ownership of the dataset or view to another user, delete
 the dataset or view, share the dataset or view with other users, make the dataset public or
 private, show and hide columns, and change the column order.
 - More Views: Click this sidebar to see the other views created from the same dataset. These might
 be filtered views, charts, or maps. The number in red reflects the total number of views created
 from the dataset.

- Filter: Click this sidebar to sort the dataset by columns, group and roll up the dataset, filter the dataset, and set the default filter for that view.
- Visualize: Click this sidebar to set conditional formatting, create a calendar, create a map (if you
 have location data), and create a chart.
- Export: Click this sidebar to access API information, print the dataset, and export the dataset.
- Discuss: If commenting is enabled, click this sidebar to comment and read other's comments on the dataset or view. Commenting can be enabled for the dataset and cell level.
- Embed: Click this sidebar to create a form from the dataset and create Social Data Player embeds
- About: Click this sidebar to view the metadata information about the dataset, edit the metadata,
 view dataset analytics, and contact the dataset owner.

Preparing Your Data

The Connecticut Open Data Portal provides a way to take data from spreadsheets and turn it into an online interactive dataset for public consumption over the internet. In essence, it delivers many of the same features available through desktop software; such as search, sort, and filter. In order to make the publishing process as simple and straightforward as possible; as well as to take full advantage of these functions, we sometimes need to change the way we store data in spreadsheets. Programs like Microsoft Excel give users significant flexibility in the way we provide information to the public, however spreadsheets can also be formatted in a way, or include additional elements that are not actually part of a dataset.

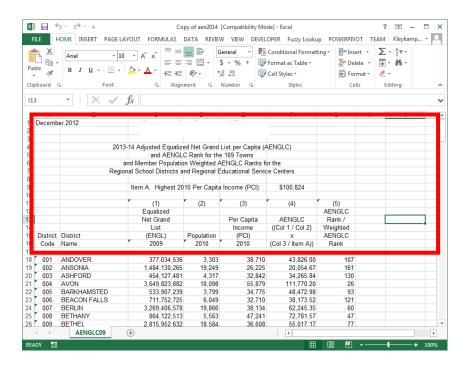


The following will provide some examples of spreadsheets that are typically formatted in manner that, while still providing useful information, often make data difficult to not only import to the Open Data Portal also can limit the utility of the data in general.

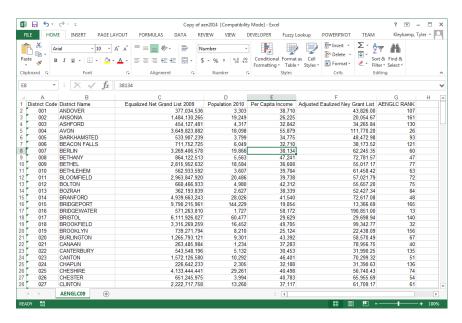
**Please note the examples use real publicly available datasets. These examples are not intended to be critical of the Agencies that publish these resources.

1.) Including descriptive information or "Metadata" in the spreadsheet.

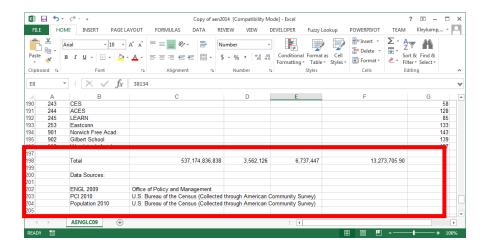
The example below contains very descriptive information within the spreadsheet. This information is critical for end users to understand what data is contained within the spreadsheet, what each column represents, and how values in those columns were derived. The Open Data Portal will allow for Metadata and deceptive elements to be incorporated, however it needs to be removed from the sheet itself prior to import:

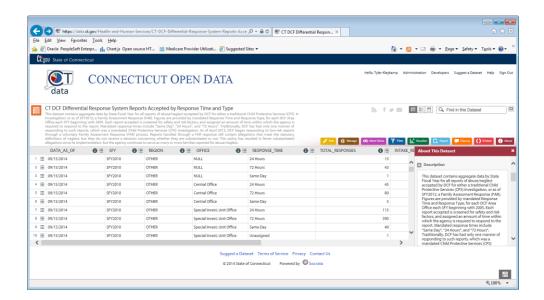


By removing the descriptive information, and providing more detailed column headers in the example below, we are now left with simple rows and columns. This will easily import into the Open Data Portal, and allow users to access a "clean" dataset.



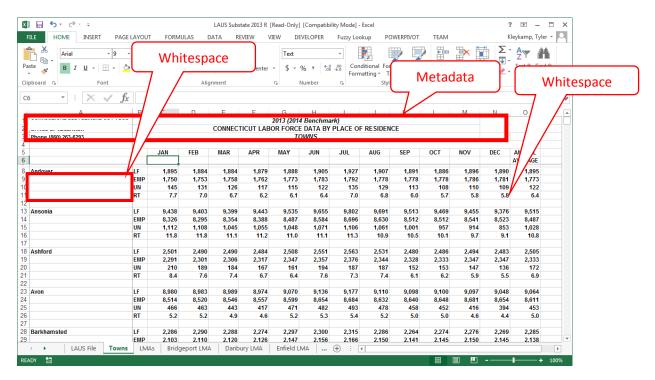
Look Out Below! – Many spreadsheets also contain footnotes, disclaimers, or other information at the end of the rows of data. This is also vital information to end users, but it will be loaded with the dataset itself, thus affecting the usability. The Open Data Portal provides for this to be associated with the dataset, however it should be removed prior to importing.



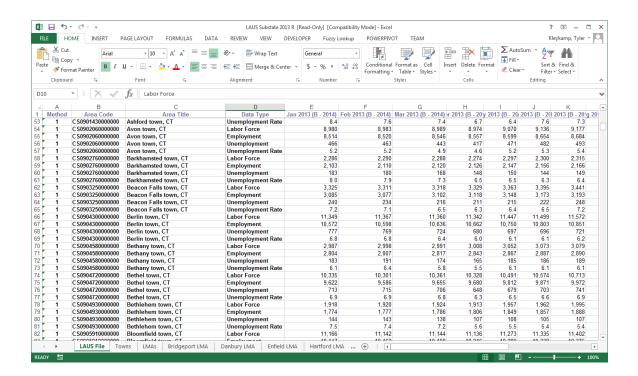


2.) Excessive Whitespace and Formatting:

The following example displays a spreadsheet, with very useful information. This spreadsheet is likely organized and formatted in a way that is intended to be printed by the end user. In essence, this sheet has empty cells, or "whitespace", intended to provide a more visually appealing product. Unfortunately this formatting limits the utility of the data contained in the spreadsheet to users who may want to interact with the data. In the example, there are four measures (LF, EMP, UN, and RT) present for each town. Thus, if a user wanted to sort the sheet to find the town with the highest EMP value for May, the sheet would quickly become disorganized. In general, every cell within a spreadsheet should contain a value.



Fortunately, this same Excel file, contains a worksheet with "raw data" that will import quite nicely into the Open Data Portal. The example below contains basically the same data that would allow an end user to derive significantly more value.



3.) Multiple Tab Workbooks:

Often times Excel workbooks are broken up into multiple tabs. In some instances this may be to provide "lookup" values when one wishes to standardize or predefine values that are eligible during the data entry process. In other instances, users do this to break up larger datasets or to present different views of data. In general, data has the most value to users when it's not broken up into subsets. More importantly however, the Open Data Portal, will only import the first tab in any given workbook. Thus, it is critical to ensure that the most robust set of data is compiled into a single sheet or tab within Excel, and that that specific tab is the first one in the sheet.



4.) "RAW DATA"

Ideally, data should be posted in its rawest form. This means the least amount of aggregation possible. In some instances, it is necessary to aggregate data, so that it cannot be used to identify an individual. However, this is only applicable when such data is protected from disclosure by State or Federal law.



Getting to "raw" fruits and vegetables

Category	Туре	Purchased
Fruit	Strawberries	42
Fruit	Banana	36
Fruit	Oranges	101
Vegetable	Kale	52
Vegetable	Arugula	29
Vegetable	Green beans	67

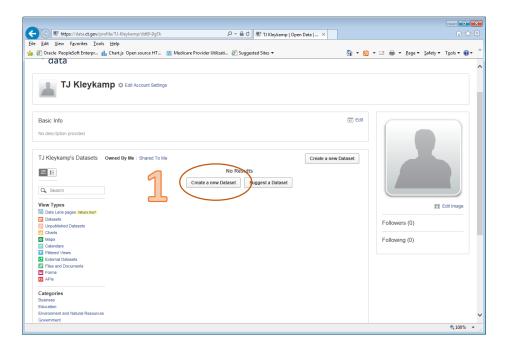
Category	Туре	Purchased	Year
Fruit	Strawberries	22	2014
Fruit	Strawberries	20	2013
Fruit	Banana	16	2014
Fruit	Banana	20	2013
Fruit	Oranges	61	2014
Fruit	Oranges	40	2013
Vegetable	Kale	30	2014
Vegetable	Kale	22	2013
Vegetable	Arugula	15	2014
Vegetable	Arugula	14	2013
Vegetable	Green beans	35	2014
Vegetable	Green beans 32 20		2013

Raw! Preferred					
Unique ID	Category	Туре	Purchase date		
25545	Fruit	Strawberries	4/5/2014		
45229	Fruit	Strawberries	4/6/2014		
41545	Fruit	Strawberries	4/7/2014		
			<u>.</u> .		
			17.		
		0			
	ىل .	40	•		
ES.					
AGERTO					

(Image source: datasf.org)

Publishing a Dataset

Once you have logged in to your Socrata Account, the follwing screen is where you will land. As a first time publisher, you won't see much here. However, as you continue to publish data or create maps and charts, you will see all of your content here.



Step 1.) Select "Create a new Dataset."

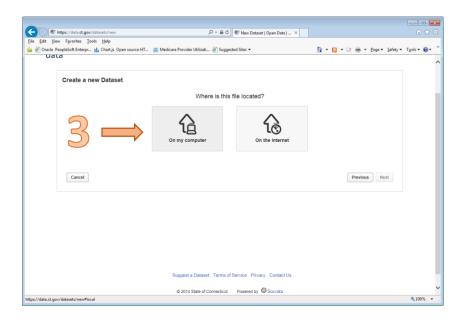
This will lead you to a new screen that provides a variety of options for loading different types of datasets or files in the Open Data Portal. The two most common types of files that are loaded are either Microsoft Excel spreadsheets (.xls or .xlsx files) or Geographic Information System files, generally known as "shapefiles" (.shp). First, we'll upload an Excel file.

Step 2.) Select "Import a Data File"

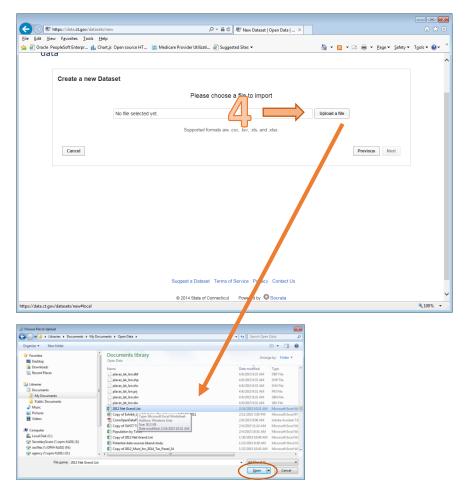


The next screen will ask you where your file is located. You can load files that are either on your computer, or on the internet. If the file is located on the internet, you'll need the URL for the file. For now, you can use one on your computer.

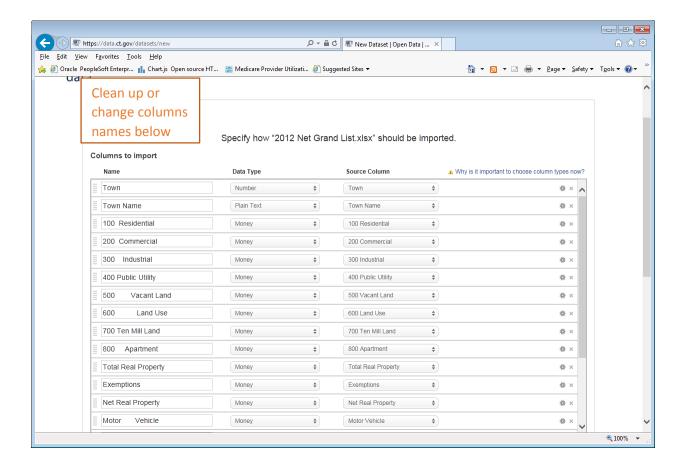
Step 3.) Select "On My Computer"



Step 4.) In the next screen select "Upload a File." This will launch Windows Explorer and allow you to navigate to the location of your file. Simply select the appropriate file and click "Open"



Once you have selected your file, the upload process will begin. Depending on the size, and number of columns, it may take a bit of time for the file to be processed. The Open Data Portal is analyzing your file to determine the column names, and the type of data that they contain (such as text, number, date, etc.). The following screen will allow you to make changes to your data, or the way that it is imported. You can modify the column names, data type, or even remove columns. For the most part, the Open Data Portal will recognize, and recommend the best way to import your data, but it's always good to verify that everything will be in imported properly.

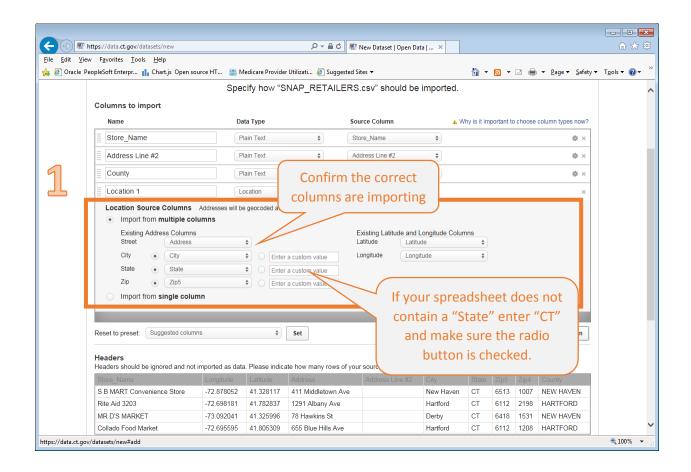


LOCATION:

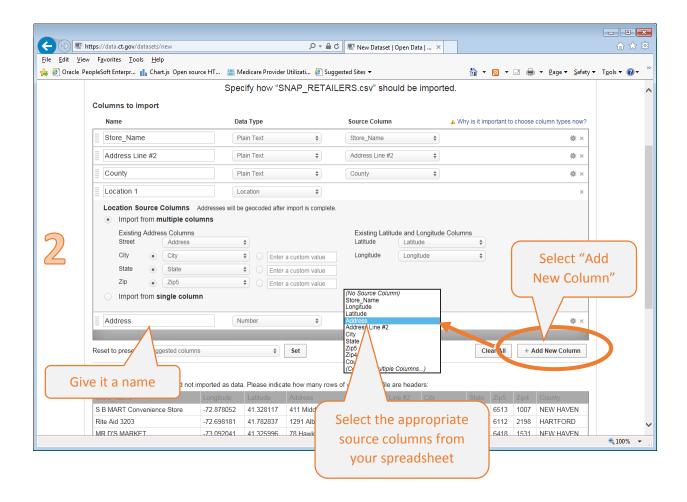
If your file has columns that reflect an address (address, street, city, state, zip code), the Open Data Portal will recognize those, and group them together to import as a "Location." The Open Data Portal has built in functionality to perform "geocoding" or "geolocation" on data sets, which is the process of taking a street address and assigning a latitude and longitude to it, so that the data can be placed on a map. This can be very useful, both to you as a publisher as well as users of the data. The Open Data Portal has a tool that will allow you to easily create interactive maps if you create a "Location" column.

However, when the dataset is uploaded this way, it groups all of these elements (address, city, state, zip code) into a single column which can impact the usefulness of your data. For instance, a user may no longer be able to sort or filter by City or Town. Fortunately, you don't have to choose between having a Location column and not having one. The Open Data Portal lets you do both! Therefore, it is recommended that you import data into a "Location" column, then add those additional elements as individual columns as follows:

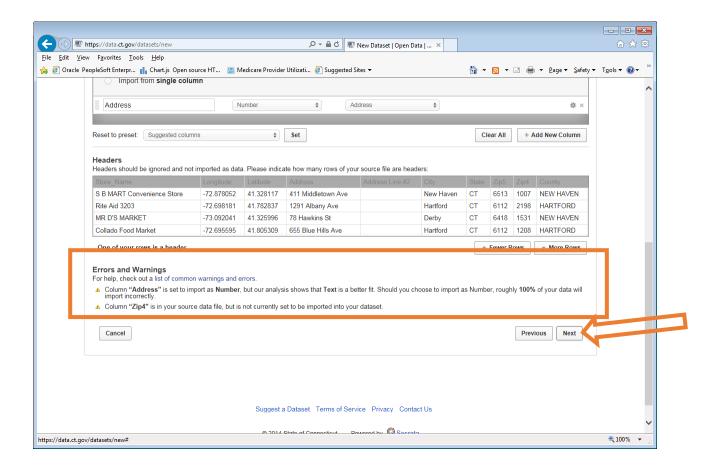
Step 1.) Verify that the correct columns from your source spreadsheet are being imported to the appropriate "Location Source Columns." Sometimes, our spreadsheets do not contain a column for State, since often only deal with Connecticut locations. It's important then to enter the abbreviation "CT" as a custom value for State.



Step 2.) In order to add your Location columns as individual columns select the "Add New Column" button directly below the list of columns to import. A new empty column name will appear. A dropdown list will provide the available columns from your source spreadsheet. Simply select the appropriate value, and then type a name for it in the empty box.



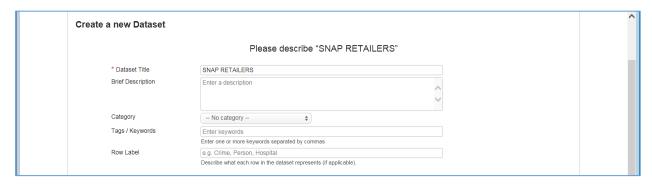
Finalizing your import; The Open Data Portal will analyze your file and advise you if it seems that there may be errors in your upload. The example below shows that when the additional "Address" column was added, it was incorrectly set to import as a "Number" rather than text. In addition, it shows that the "Zip4" column from the source dataset was omitted from the upload. If there are no errors present, or you choose to ignore them (generally not advised), click the "Next" button to finalize your import.



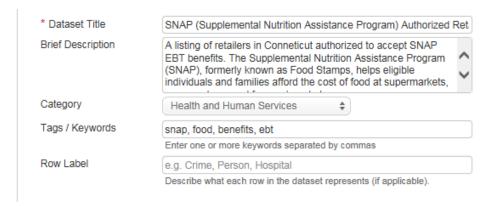
METADATA:

Metadata is something that describes your dataset. In other words, it's data about data. It's also VERY important. Giving your dataset a meaningful title (without acronyms), a robust description that explains what it is, why it is collected, what it means, and what its limitations may be are all very important to potential users of the data. We typically provide this level of information on a web page, in a document, or with the spreadsheet when we distribute the data.

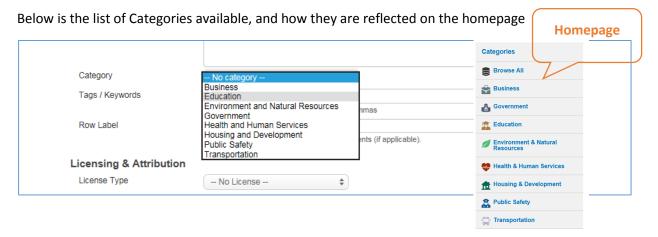
Below is an example of what you will likely see after your data is loaded:



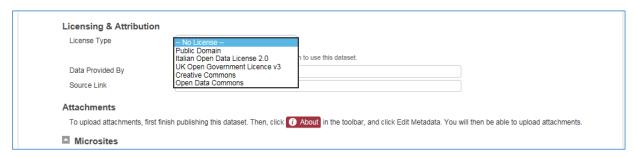
The following example provides a more descriptive title as well as additional description on the dataset itself. Your title and description should provide enough detail so that users can have a full understanding of what the dataset is and how it can be used. In addition, you should select a category that best fits your dataset. Note that these categories are fairly broad and intended to aid users who may be browsing the Open Data Catalog, and are not likely to know which agency published the data.



Also, note above the use of "Tags/Keywords" which can aid in searches.



License Type: In general, CT government data is "Public Domain" however, because the software for the Open Data Portal is used by governments around the world, other options are available. It is important to explicitly identify your data as "Public Domain" so that users know there are no legal restrictions associated with the use of the data. A "Creative Commons" license may also be used, which simply requires that users of your data attribute the source in any publications or projects in which it is used.



Data Provided By: This should be used to specify the State Agency providing the data (e.g Office of Policy and Management) – Do not use an acronym (OPM)

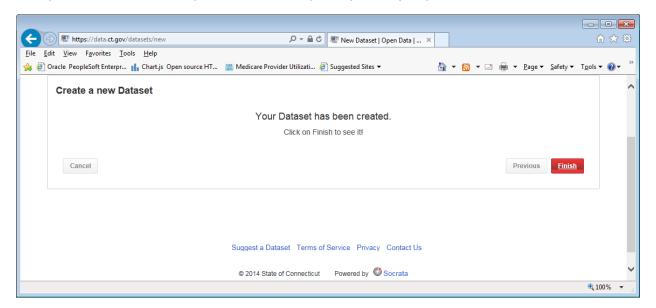
Source Link: If there is a web page that provides additional information about the dataset, agency, or program the url (website address) it should be included here

Agency: This area is reserved for future use, and will include a dropdown list of State Agencies

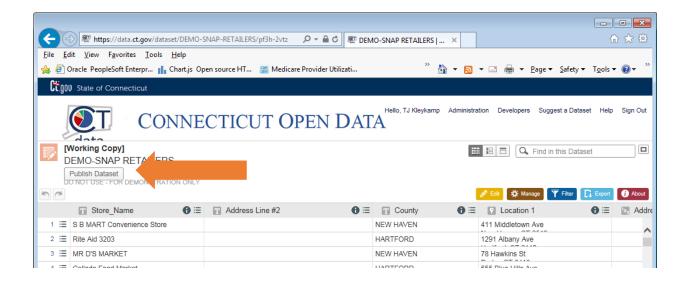


Privacy Settings: Generally you should select "Public" as the intent of the Open Data Portal is to provide public access to data. However, the Portal can be used to privately share data between 2 or more users. However, the Open Data Portal should never be used to share any data which could contain Personally Identifiable Information (PII) or Protected Health Information (PHI) that is protected by state of federal law.

Finally, click Finish. However, your data won't be publicly visible just yet.



You now should have a "Working Copy" of your data set. For now, it can only be seen by you and the Site Administrator. The purpose is to allow you to inspect your data to make sure it imported properly, and to make any final formatting changes. If everything looks good, click "Publish Dataset"



Finally, your dataset is now "Open!"

